



Umut Altun

WORK EXPERIENCE

 **T.I.M GROUP ITALIA** – ROMA, ITALY

MACHINE LEARNING ENGINEER – 05/02/2025 – CURRENT

- Developed an end-to-end AI-powered system for automated contract analysis, leveraging advanced NLP techniques. Utilized LLM models for contract clause extraction and semantic classification. Implemented Optical Character Recognition (OCR) for digitizing scanned documents and built custom pipelines for entity recognition (e.g., parties, dates, obligations).
- Developing a Retrieval-Augmented Generation (RAG) system that enables real-time, context-aware assistance for call center agents by combining dense document retrieval with advanced generative AI models

 **TAPNATION** – PARIS, FRANCE

DATA SCIENTIST – 01/05/2022 – 05/02/2025

- Developed a statistical modeling tool to predict user lifetime value (LTV), leveraging advanced regression techniques and historical user data for accurate revenue forecasting. Built scalable data pipelines for model training and deployed automated reporting dashboards to inform acquisition and retention strategies.
- Designed a text-to-SQL marketing AI agent using the Agno Agent framework, enabling users to query marketing data and generate actionable insights through natural language conversations. Integrated with backend databases to support real-time, ad-hoc analytics for campaign optimization.
- Created a long-term revenue projection tool that models business growth and return-on-ad-spend (ROAS) curves to forecast future earnings. Provided scenario-based forecasting and visualization capabilities to support strategic planning and budgeting.

 **P.I. WORKS** – ISTANBUL, TÜRKİYE

DATA ANALYST – 01/11/2018 – 01/05/2022

- Contributed to the development of a self-service, multi-domain performance analytics dashboard that aggregates and visualizes mobile network KPIs such as throughput, latency, and capacity.
- Collaborated in building a geolocation-enabled customer experience analytics tool that maps end-user performance metrics across various regions to identify coverage and service quality issues.
- Participated in the implementation of an automated anomaly detection system using statistical methods and time-series analysis to identify irregularities in mobile network performance KPIs.
- Worked as part of a team to create a predictive analytics model identifying customer segments at high risk of churn, leveraging historical usage and service quality metrics. Supported model deployment within a decision-support tool to inform targeted retention campaigns.

EDUCATION AND TRAINING

01/09/2023 – CURRENT Roma, Italy

DATA SCIENCE - MASTER STUDENT Sapienza University

Pursuing a Master's in Data Science with a thesis on innovative applications of Large Language Models (LLMs) for RAG framework.

Graduated with a strong foundation in network technology and wireless systems, completing a thesis on challenges in 5G NR-U coexistence.

Final grade 3.13 | Thesis Coexistence in 5G NR-U

Expanded academic and cultural horizons through an Erasmus exchange program in electronic and communication engineering.

Final grade 3.23

● LANGUAGE SKILLS

Mother tongue(s): **TURKISH**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ITALIAN	B1	B1	A2	A2	A2
ENGLISH (IELTS C1)	C1	B2	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● SKILLS

Programming languages Python (proefficient) C++ SQL | Microsoft Office | Power BI/ Power Query | Probabilistic Programming | JAX, Pytorch, Tensorflow, Keras | GIT version control, Linux Command | Hadoop - Spark - HDFS (Base)